

EIS001903

February 28, 2000

Ms Wendy R. Dixon, EIS Project Manager
Yucca Mountain Site Characterization Office
Office of Civilian Radioactive Waste Management
U.S. Department of Energy
P.O. Box 30307, M/S 010
North Las Vegas, NV 89036-0307

RECEIVED

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Subject: Draft Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada (DOE/EIS-0250D)

Dear Ms Dixon:

The State of Idaho hereby submits the following comments on the aforementioned EIS. These include both broad policy concerns and specific comments.

Policy Concerns

Under a 1995 court settlement between the State of Idaho, DOE and Department of the Navy, DOE must remove "all spent fuel ... from Idaho by January 1, 2035." The settlement also requires DOE to "treat all high-level waste currently at [INEEL] so that it is ready to be moved out of Idaho for disposal by a target date of 2035." Because of these obligations, DOE's proposed action in this EIS should include receipt of all spent nuclear fuel and high-level waste in Idaho at the Yucca Mountain repository.

After reviewing the EIS, the State of Idaho has serious concerns regarding several DOE positions that preclude high-level waste now stored at the INEEL from being accepted for disposal at the proposed Yucca Mountain repository.

1. DOE's Exclusion Policy for RCRA Waste

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The Draft EIS states it is DOE's policy that the proposed repository will not accept RCRA waste. The State of Idaho is highly critical of this policy, which would virtually prevent the proposed repository from accepting most of DOE's high-level waste, including INEEL waste and the thousands of canisters at Hanford with RCRA codes.

The Nuclear Waste Policy Act clearly directs DOE to determine if Yucca Mountain can safely and permanently isolate high-level waste from the biological environment. There

*an Idaho state program that independently
monitors activities at the INEEL on behalf of
the citizens of Idaho*

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is no directive in this Act that allows DOE to exclude candidate high-level waste streams from being accepted in a suitable repository. Although the Nuclear Waste Policy Act may have originally contemplated a second repository to accommodate quantities of high-level waste and spent nuclear fuel in excess of the 70,000 metric tons of heavy metal allocated to Yucca Mountain, a second repository is no longer a realistic expectation.

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Given the difficulties and costs of evaluating Yucca Mountain, it is irresponsible for DOE to exclude all RCRA waste streams from consideration in this EIS. DOE must take steps to allow acceptance of certain hazardous constituents at the proposed Yucca Mountain repository.

The EIS must evaluate an option where Yucca Mountain meets legal requirements for receiving RCRA waste, either under current or future laws. DOE may seek a RCRA part B permit for RCRA waste disposal or pursue legislative relief of these requirements. Notably, based on its experience with the WIPP facility, DOE could accept non-RCRA spent nuclear fuel at the repository until it met legal requirements for RCRA waste disposal.

Under the stated DOE policy, the high-level waste now stored at INEEL will not be eligible for disposal unless the listed RCRA codes associated with this waste are removed through delisting. However, many delisting petitions have not been successful, and the State of Nevada's policy concerning Yucca Mountain makes it unlikely to cooperate with any delisting efforts. Even though DOE has indicated it will pursue a delisting process to allow acceptance of INEEL and other DOE high-level waste, the delisting approach does not appear to be a viable one. Therefore, the Final EIS must consider other reasonable alternatives that include receiving RCRA waste at Yucca Mountain.

2. Inappropriate Calculation of Metric Tons Heavy Metal

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DOE uses the formula of 0.5 metric tons of heavy metal per canister of high-level waste. However, this formula is based on generalizations and does not adequately reflect the actual content of heavy metal in the waste or risks associated with these radioactive constituents. As noted in Appendix A of the Draft EIS, the way in which DOE has decided to calculate metric tons of heavy metal results in an inventory of high-level waste that exceeds by over half the allocated capacity in the proposed Yucca Mountain repository. In other words, there may not be enough allocated space for INEEL's high-level waste, if high-level waste from other sites is accepted first. DOE needs to adopt other methods for calculating metric tons of heavy metal, based on actual radionuclide constituents and risk. The State of Idaho endorses alternative methods, presented in Appendix A, for calculating metric tons of heavy metal that are

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continued based on actual radionuclide constituents and risk, and that allow INEEL's high-level waste to fit within inventory limits.

3. Premature Closure of Yucca Mountain

3 DOE's preferred alternative ends acceptance of waste at Yucca Mountain in the year 2033. With INEEL's projected high-level waste treatment plans reaching completion in 2035, it is clear DOE does not intend for this proposed repository to be the recipient of at least some of Idaho's high-level waste. Again, relying on the prospect of another repository or some other solution to the high-level waste disposal problem is unconscionable given the difficulties in finding a suitable site and the current budgetary climate. The EIS should consider a waste acceptance schedule that allows for receipt of all of INEEL's high-level waste at the proposed repository.

Document-Specific Comments

Summary, Section S.3.1.2, Page S-19, Figure S-9

4 The connections between dates and items below the time line should be clarified. For example, the figure makes it appear that emplacement begins sometime between 2010 and 2031 and ends sometime between 2033 and 2110. This is inconsistent with text references for emplacement beginning in 2010 and ending in 2033.

Summary, Section S.4.1.1, Page S-34, Figure S-17

5 This section should provide a legend corresponding to the white area with horizontal hatching within and extending from the northeast corner of the Toiyabe National Forest.

Volume 1 Table 1-1, Page I-25

6 The table contains a list of related environmental documents. The Purpose and Need section of this EIS should also identify relevant legal agreements. These include the 1995 court settlement between the State of Idaho, DOE, and the Department of Navy. This settlement specifies several deadlines related to removal of wastes from the INEEL. The INEEL is also subject to a Consent Order signed October 31, 1995, which makes the INEEL Site Treatment Plan a legally binding agreement.

Volume 1 Table 1-1, Page I-25, 2nd Reference

7 Table 1-1 references a "Draft EIS, Idaho High-Level Waste and Facilities Disposition (In preparation)." This document is now complete and the title is: *Idaho High-Level Waste and Facilities Disposition Draft Environmental Impact Statement (DOE/EIS-0287D) (EIS-2000-001), dated December 1999.*

Volume I, Section 6.1.1, Page 6-5, Text Box, Paragraph 5 (header "permitted overweight ...")

8 "Nine-axle tractor-trailer trucks (steering axle and three drive axles on the tractor and three axles on the trailer)...." 1+3+3 is 7, not 9.

Volume I, Section 11.2.4, Page 11-11 (under the header "Resource Conservation and Recovery Act...")

9 "[U]nder current Civilian Radioactive Waste system requirements, DOE could not accept hazardous waste for disposal at Yucca Mountain." As discussed in our General Comments, this statement and the sentences that follow it regarding treatment and delisting of hazardous waste have significant implications with respect to disposal of DOE high-level waste at the repository.

DOE's policy against acceptance of any RCRA waste at the repository and the resulting difficulty in disposing of high-level waste is a major issue that deserves discussion in the Summary and in the early sections (1 and/or 2) of the EIS beyond this brief discussion in Section 11. The EIS should discuss options where DOE would accept RCRA waste at Yucca Mountain.

Volume I, Section 11.3, Pages 11-18 and 11-19, Table 11-2

10 DOE Order 435.1 should be added to this table and Order 5820.2A possibly deleted. Other parts of the EIS may also require modification to be consistent with the new Order.

Volume II, Appendix J, Section J.1.2.1.2, Page J-20, Table J-8

11 The Summary and main body of the EIS should explain the basis of the allocation and prioritization of DOE high-level waste shipments to the repository. The proposed action must consider the transfer of INEEL high-level waste to the proposed Yucca Mountain repository. This information should not be hidden in an obscure table in an Appendix.

Volume II, Appendix J, Section J.1.3.2.1, Pages J-39 to J-41

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The list of bullet items on page J-39 and/or the discussion on pages J-40 and J-41 regarding the “second kind of information” and the “third kind of information” should be clarified. For example, the first full paragraph on page J-41 states, “The third kind of information--the distances individuals live from the route used in the analysis--is the estimated the [sic] number of people who live within 800 meters... of the route.” Is the “third kind of information” distances? If so, this information is not explicitly used in RADTRAN4, which assumes uniform population density within a 1-mile corridor. Or is the “third kind of information” population density? If so, how does this differ from the “second kind of information”?

Volume II, Appendix J, Section J.1.3.2.2.1, Page J-45, Paragraphs 1 and 3; Section J.1.3.2.2.2, Page J-47, Paragraph 2

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Paragraph 1 on page J-45 states the baseline likelihood of fatal cancer is 23%. Paragraph 3 on page J-45 and paragraph 2 on page J-47 (citing the same reference) states the baseline likelihood of fatal cancer is 22 percent. This inconsistency should be corrected. Also, paragraph 3 on page J-45 incorrectly indicates that 8 percent plus 22 percent is 32 percent.

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Volume II, Appendix J, Section J.1.4.1.2, Page J-51, Paragraph 1

“Idaho National Environmental and Engineering Laboratory” should be “Idaho National Engineering and Environmental Laboratory.”

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Volume II, Appendix J, Section J.1.4.2.1, Page J-59, Paragraph 1 (under the header “Exposure Pathways”), and Paragraph 2 (under the header “Emergency Response...”)

The discussion of dose from ingestion of contaminated crops should be changed or clarified, since ingestion dose estimation has not been enabled in RADTRAN4 (i.e., RADTRAN4 always reports ingestion doses of zero.)

Volume II, Appendix J, Section J.1.4.2.1, Pages J-60 to J-63 (under the header “Estimating Consequences of Maximum Reasonably Foreseeable Accident Scenarios”)

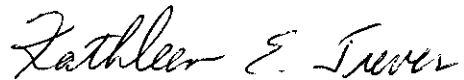
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The EIS should include a qualitative discussion of the nature of the maximum reasonably foreseeable accident scenarios. The EIS should also identify the composition and amount of material at risk (i.e., what kind of fuel and how much?) and what release fractions (from Table J-21 or Table J-22) were used

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Thank you for the opportunity to comment on this Draft EIS. If you have any questions or require clarification, please call Ann Dold at (208) 528-2600.

Very truly yours,

A handwritten signature in cursive script that reads "Kathleen E. Trever".

Kathleen Trever
Coordinator-Manager

nrh